AMENDMENTS TO THE CLAIMS

1. (Currently amended) Directional coupler in coplanar waveguide technology comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a ~~feeded~~ supplied wave at the first connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination, and coplanar ground conductors bordering the outside of each of the center conductors, characterized in that

the spacing between the two center conductors changes along the longitudinal extension of the center conductors over a coupler section, and

the second connection of the first directional coupler unit is connected via a center conductor with two adjacent ground conductors to a second connection of a second directional coupler unit.

2. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 1, characterized in that

the spacing between the center conductors increases exponentially in the direction from the first connection and/or from the coupled connection towards the second connection and/or towards the termination.

3. (Currently amended) Directional coupler in coplanar wave guide technology comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a ~~feeded~~ supplied wave at the first connection, a termination, a first center conductor connecting the first

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connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, characterized in that

the spacing in each case between a center conductor and an adjacent ground conductor changes along the longitudinal extension of the center conductor over a coupler section,

the spacing between the two center conductors changes along the longitudinal extension of the center conductor over the coupler section, and

the second connection of the first directional coupler unit is connected via a center conductor with two adjacent ground conductors to a second connection of a second directional coupler unit.

4. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 3, characterized in that

the spacing in each case between a center conductor and an adjacent ground conductor increases or decreases in a linear manner between two adjacent coupler segments originally of constant width.

5. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 4, characterized in that

the spacing in each case between a center conductor and an adjacent ground conductor lies above a predetermined lower limit value gMIN and below a predetermined upper limit value gMAX.

6. (Canceled)

7. (Currently amended) Directional coupler in coplanar waveguide technology comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly

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from or to the first connection, a coupled connection for coupling a fraction of a ~~feeded~~ supplied wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, characterized in that

the width of the conductor track of the two center conductors changes along the longitudinal extension of the center conductors over a coupler section, and

a second directional coupler unit having a second connection, the second connection of the first directional coupler unit is connected via a center conductor with two adjacent ground conductors to a second connection of a second directional coupler unit.

8. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 7, characterized in that

the width of the conductor track of the center conductors increases continuously in the direction from the first connection and/or from the coupled connection towards the second connection and/or the termination.

9. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 7, characterized in that

the spacing between the two center conductors changes along the longitudinal extension of the center conductors over the coupler section.

10. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 8, characterized in that

the spacing between the two center conductors changes along the longitudinal extension of the center conductors over the coupler section.

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11. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 7, characterized in that

the termination is terminated with a trapezoidal absorber.

12. (Canceled)

13. (Currently amended) Directional coupler in coplanar waveguide technology according to Claim [[12]] 7, characterized in that

the first and the second directional coupler unit are integrated monolithically in mirror image arrangement on a common substrate.

14. (Previously presented) Directional coupler in coplanar waveguide technology according to Claim 7, characterized in that,

in the region of the narrowest spacing between the ground conductors, the ground conductors are connected via air bridges, and/or in regions of wider spacing between the ground conductors, the ground conductors are connected via bonding wires.

15. (Canceled)

16. (Currently amended) Directional coupler in coplanar waveguide technology ~~according to Claim 7, characterized in that~~ comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a supplied wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, and first and second external connections, characterized in that

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the width of the conductor track of the two center conductors changes along the longitudinal extension of the center conductors over a coupler section, and

tapers are provided at the transitions between ~~coaxial feed lines~~ the external connections and the center conductors, which continuously adapt the cross-sectional geometry of the coaxial feed lines to the cross-sectional geometry of the center conductors in order to minimize loss and reflection.

17. (Previously presented) Directional coupler in coplanar waveguide technology according to any one of Claims 8 to 10, characterized in that

the spacing in each case between a center conductor and an adjacent ground conductor changes along the longitudinal axis of the center conductors over the coupler section.

18. (Previously presented) Directional coupler in coplanar waveguide technology according to any one of Claims 1 to 5, characterized in that

the termination is terminated with a trapezoidal absorber.

19. (Currently amended) Directional coupler in coplanar waveguide technology according to Claim [[6]] 3, characterized in that

the termination is terminated with a trapezoidal absorber.

20. (Previously presented) Directional coupler in coplanar waveguide technology according to any one of Claims 8 to 10, characterized in that

the termination is terminated with a trapezoidal absorber.

21-22. (Canceled)

23. (Currently amended) Directional coupler in coplanar waveguide technology ~~according to any one of Claims 8 to 11, characterized in that~~ comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second

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connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a feeded wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, characterized in that

the width of the conductor track of the two center conductors changes along the longitudinal extension of the center conductors over a coupler section,

the width of the conductor track of the center conductors increases continuously in the direction from the first connection and/or from the coupled connection towards the second connection and/or the termination, and

the second connection of the first directional coupler unit is connected via a center conductor with two adjacent ground conductors to a second connection of a second directional coupler unit.

24. (Previously presented) Directional coupler in coplanar waveguide technology according to any one of Claims 1 to 5, characterized in that

in the region of the narrowest spacing between the ground conductors, the ground conductors are connected via air bridges, and/or in regions of wider spacing between the ground conductors, the ground conductors are connected via bonding wires.

25. (Currently amended) Directional coupler in coplanar waveguide technology according to Claim [[6]] 3, characterized in that

in the region of the narrowest spacing between the ground conductors, the ground conductors are connected via air bridges, and/or in regions of wider spacing between the ground conductors, the ground conductors are connected via bonding wires.

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26. (Previously presented) Directional coupler in coplanar waveguide technology according to any one of Claims 8 to 13, characterized in that

in the region of the narrowest spacing between the ground conductors, the ground conductors are connected via air bridges, and/or in regions of wider spacing between the ground conductors, the ground conductors are connected via bonding wires.

27-29. (Canceled)

30. (Currently amended) Directional coupler in coplanar waveguide technology ~~according to any one of Claims 1 to 5, characterized in that~~ comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a feeded wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination, first and second external connections, and coplanar ground conductors bordering the outside of each of the center conductors, characterized in that

the spacing between the two center conductors changes along the longitudinal extension of the center conductors over a coupler section, and

tapers are provided at the transitions between ~~coaxial feed lines~~ the external connections and the center conductors, which continuously adapt the cross-sectional geometry of the coaxial feed lines to the cross-sectional geometry of the center conductors in order to minimize loss and reflection.

31. (Currently amended) Directional coupler in coplanar waveguide technology ~~according to Claim 6, characterized in that~~ comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in

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or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a feeded wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, and first and second external connections, characterized in that

the spacing in each case between a center conductor and an adjacent ground conductor changes along the longitudinal extension of the center conductor over a coupler section,

the spacing between the two center conductors changes along the longitudinal extension of the center conductor over the coupler sections, and

tapers are provided at the transitions between ~~coaxial feed lines~~ the external connections and the center conductors, which continuously adapt the cross-sectional geometry of the coaxial feed lines to the cross-sectional geometry of the center conductors in order to minimize loss and reflection.

32. (Currently amended) Directional coupler in coplanar waveguide technology ~~according to any one of Claims 8 to 15, characterized in that~~ comprising at least one first directional coupler unit with a first connection for feeding in or guiding out a wave, a second connection for feeding in or guiding out a wave supplied directly from or to the first connection, a coupled connection for coupling a fraction of a feeded wave at connection, a termination, a first center conductor connecting the first connection and the second connection, a second center conductor connecting the coupled connection and the termination and ground conductors bordering the outside of each of the center conductors, and first and second external connections, characterized in that

the width of the conductor track of the two center conductors changes along the longitudinal extension of the center conductors over a coupler section,

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the width of the conductor track of the center conductors increases continuously in the direction from the first connection and/or from the coupled connection towards the second connection and/or the termination, and

tapers are provided at the transitions between ~~coaxial feed lines~~ the external connections and the center conductors, which continuously adapt the cross-sectional geometry of the coaxial feed lines to the cross-sectional geometry of the center conductors in order to minimize loss and reflection.

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